

Health Consultation Summary

Hunters Point Shipyard Parcel E Landfill Fire

San Francisco, California - January 2001

ATSDR's Health Consultation

In November 2000, the U.S. Environmental Protection Agency (EPA) requested that ATSDR evaluate sampling data related to the 14-acre Parcel E Landfill fire on Hunters Point Shipyard, which burned for six hours August 16, 2000. Several areas, less than five acres, continued to smolder for nearly one month. ATSDR analyzed the data and prepared a *health consultation* document to address the likelihood that people in the Bayview/Hunters Point community could experience adverse health effects from their exposure to components released during and after the fire. A health consultation responds to specific requests for information about health threats related to a particular site or hazardous material. This summary contains our public health evaluation and addresses concerns the community has expressed to ATSDR.

ATSDR's 1994 Public Health Assessment

In 1994, ATSDR published a public health assessment for the Treasure Island Naval Station, Hunters Point Annex. A public health assessment is a comprehensive evaluation of human exposure to hazardous substances. Parcel E Landfill was one of the sites evaluated as part of the public health assessment. ATSDR identified the potential for exposure to hazardous substances at that time. Methane pockets within the landfill were noted as a public health concern to be further addressed by the Navy. The Navy collected additional methane samples

throughout the landfill. More methane sampling is being conducted as part of the ongoing subsurface monitoring program. Additionally, methane will be investigated again in spring 2001. ATSDR will evaluate the data as it becomes available and make recommendations in order to help assure the safety of the people who could potentially be affected.

For More Information:

Contact Bill Nelson, ATSDR Regional Representative, at 415-744-2194 or 1-888-422-8737.

ATSDR's Health Message

Exposure to Fire Components: ATSDR determined components (chemical and physical) released from the fire August 16, 2000, could have caused reversible, short-term adverse health effects in people exposed. Health effects could include burning, itching, or watery eyes and sinuses; headache; nausea; breathing difficulty; and asthma-like symptoms. Individuals highly sensitive to the effects could be anyone with previous respiratory conditions such as asthma or emphysema, and also children and the elderly. Health effects would be of short duration, developing within a few days of exposure and lasting no more than two or three weeks after exposure stopped. The Bayview/Hunters Point community already has a high incidence of respiratory diseases.

Exposure to Smoldering Components: Air sampling data collected 15 days after the fire was extinguished, but during the smoldering and since that time, do not indicate a release of chemical or physical components likely to result in adverse health effects.

Recommendations: As a way of reducing exposures to this vulnerable population, ATSDR recommends the Navy notify the Bayview/Hunters Point community of any planned or unplanned air releases that have the potential to move off base.

Additionally, ATSDR recommends the Navy conduct air monitoring during planned events that are likely to release particulates or chemicals into the air.

ATSDR

The Agency for Toxic Substances and Disease Registry (ATSDR) is a non-regulatory, federal public health agency. ATSDR is within the U.S. Department of Health and Human Services. Created by 1980 Superfund legislation, ATSDR evaluates human exposure to hazardous substances released into the environment and makes recommendations to stop or prevent such exposures to protect public health.

Community Concerns



ATSDR spoke with several community members, local health officials, and health care providers in the Bayview/ Hunters Point community closest to the Hunters Point Shipyard who had the following concerns.

How do you know the health problems of people in the Bayview/Hunters Point community are short-term?

The reason we believe health effects will be reversible and short-term is based on ATSDR's review of the scientific literature including medical reports and other information that detail 1) the chemicals that could have been released by the fire 2) the likely health effects from those chemicals, and 3) the health effects seen in firefighters and in communities near various types of fires. The fire information we reviewed included landfill fires, railroad tie fires, and forest fires. Reports of human exposure to fire components under similar circumstances lasting less than one year showed only short-term health effects. No long-term health effects were reported. Based on the duration and extent of the fire, distance of the fire from the community, and most frequent wind direction, our conclusion is people breathing the components released by the Hunters Point Shipyard Parcel E Landfill fire may have experienced health problems such as burning, itching or watery eyes and sinuses; headache; nausea; breathing difficulty; and asthma-like symptoms that would have started within a few days after exposure and lasted no more than two or three weeks.

Without sampling data collected during the fire, how do you know the fire was not a "toxic fire?"

ATSDR assumed the fire burned "toxic" or harmful materials such as railroad ties as well as sawdust, brush,

and grasses. Because sampling data was not collected during the fire, we used existing information from other landfill fires, railroad tie fires, and forest fires to predict whether people were likely to experience health problems from breathing the components released by the Hunters Point Shipyard Parcel E Landfill fire. Although the fire would have been "toxic," the effects would be of short duration.

Have there been landfill fires at Hunters Point Shipyard before?

The Navy told ATSDR there have never been any other fires on the Parcel E landfill. However, there have been fires in other areas of the Hunters Point Shipyard such as grass fires, empty metal fuel tanks, and building fires. None of the previous fires were this large, therefore the off-site community should not have long-term effects. However, we are recommending future air releases be reported to the community.

If I smelled smoke, am I likely to have health problems as a result?

Not necessarily. Being able to smell smoke is based on its odor threshold. A chemical's odor threshold is the lowest concentration of that chemical in air that people can smell. The concentration of many chemicals that emit detectable odors is much lower (often 10 to 1000 times lower) than the amount of chemicals likely to cause health problems. Even though people differ, some health conditions such as asthma may be triggered by certain odors even though the concentration of chemicals is much lower than what is required to cause a toxic effect.

Is there a fire currently burning underground in the Parcel E landfill?

Air monitoring stations have been collecting data for 24 hours a day since September 8, 2000 and have not

detected any of the components that would be released from an underground fire. September 22, 2000, the Navy made a thermal image of the area, which did not show any hot spots on the surface of the burned area. As a final measure to ensure there are no remaining subsurface smoldering areas, the Navy is conducting subsurface monitoring of temperature and fixed gas concentrations. Preliminary results indicate there is no continued subsurface smoldering. A final report is expected by March 2001.

If the current chemical contaminant levels from Parcel E are safe, why does the Bayview/Hunters Point community have so many health problems?

Numerous city, state, and federal health care groups are working to determine why the Bayview/Hunters Point community has so many health problems, but it is not known at this time. It is a widely reported fact that the Bayview/Hunters Point community has higher than average incidence of asthma, respiratory disease, diabetes, lung cancer, and other health problems. However, the rates here are similar to other urban communities with numerous industries and similar economic and demographic makeup. No one factor has proven to be the cause, but it could be a combination of factors such as exposure to industrial pollutants, access to medical care, or lifestyle and dietary factors.

How can the situation change so the community is informed of similar events in the future?

The Navy, along with community members, U.S. EPA, and local agencies, began meeting approximately every three weeks to discuss and develop notification procedures for the community in case of future events.